State of California AIR RESOURCES BOARD

EXECUTIVE ORDER U-R-16-18

Relating to Certification of New Heavy-Duty Off-Road Equipment Engines

DAIMLERCHRYSLER AG

Pursuant to the authority vested in the Air Resources Board by Sections 43000.5, 43013 and 43018 of the Health and Safety Code; and,

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That the following DaimlerChrysler AG 1999 model-year engine, with rated power between 175 and 750 horsepower, and exhaust emission control systems are certified as described below for use in heavy-duty off-road equipment:

Typical Equipment Usage: Crane, Road Grader, Harvester, Compressor

Fuel Type: Diesel

Engine Family	Liters	Exhaust Emission Control Systems and Special Features		
XMBXL5.96R6A	6.0	Turbocharger Smoke Puff Limiter Charge Air Cooler		

Engine models and codes are listed on attachments. Production engines shall be in all material respects the same as those for which certification is granted.

The total hydrocarbons (THC), carbon monoxide (CO), nitrogen oxides (NOx), and particulate matter (PM) certification exhaust emission standards, in grams per brake horsepower-hour (g/bhp-hr), and the opacity of smoke emission standards, in percent (%), during acceleration (Accel), lugging (Lug), and peak (Peak) modes, for this engine family are (Title 13, California Code of Regulations, Section 2423):

Exhaust Emissions (g/bhp-hr)			Smoke Opacity (%)			
THC	<u>CO</u>	<u>N0x</u>	<u>PM</u>	<u>Accel</u>	Luq	<u>Peak</u>
1.0	8.5	6.9	0.4	20	15	50

The THC, CO, NOx and PM exhaust emission certification values, in g/bhp-hr, and the opacity of smoke emission certification values, in percent (%), for this engine family are:

Exhaust Emissions (g/bhp-hr)			Smoke Opacity (%)			
THC	<u>CO</u>	<u>NOx</u>	<u>PM</u>	<u>Accel</u>	<u>Luq</u>	<u>Peak</u>
0.4	1.0	5.3	0.3	15	9	25

BE IT FURTHER RESOLVED: That the listed engine models comply with the "Exhaust Emission Standards and Test Procedures--Heavy-Duty Off-Road Diesel Cycle Engines" (Title 13, California Code of Regulations, Section 2423) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the listed engine models also comply with the "Emission Control Labels--1996 and Later Heavy-Duty Off-Road Diesel Cycle Engines" (Title 13, California Code of Regulations, Section 2424) for the aforementioned model year.

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Section 2425 et seq.).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

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R) B. Summerfield, Chief
Mobile Source Operations Division

LARGE ENGINE MODEL SUMMARY

2/8/99

EO: U-R-16-18

Manufacturer: DaimlerChrysler AG Process Code: New Submission EPA Engine Family: _XMBXL5.96R6A Manufacturer Family Name: NA 4. Fuel Rate: 5.Fuel Rate: 7.Fuel Rate: 3.BHP@RPM mm/stroke @ peak HP (lbs/hr) @ peak HP 6. Torque @ RPM 1.Engine Code 2.Engine Model 8.Fuel Rate: mm/stroke@peak 9.Emission Control (SAE Gross) (for diesel only) (for diesels only) (SEA Gross) (lbs/hr)@peak torque Device Per SAE J1930 torque 366 LA. E I/1 OM 366 LA 248@2500 110 590@* 90.4 119 58.7 TC, EM, SPL, CAC 366 LA. E 1/2 OM 366 LA 237@2600 101 86.3 553@* 114 56 EM, SPL CAC 366 LA. E I/3 OM 366 LA 233@2500 103 84.7 553@* 114 56 EM, SPL CAC 366 LA. E I/4 OM 366 LA 229@2400 104 82.0 553@* 114 56 EM, SPL 366 LA. E 1/5 OM 366 LA 218@2400 100 78.9 527@* 108 53.3 EM, SPL CAC 366 LA. E I/6 OM 366 LA 208@2600 87 74.0 476@* 93 49 EM, SPL 366 LA. E I/7 OM 366 LA 205@2500 87 71.5 476@* 93 49 EM, SPL * 1400 - 1600